

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ventor:

Choi et al.

App. No.:

10/645,306

GPAU:

1763

Filing Date: August 21, 2003

Examiner:

Dkt. No.:

P86-28-03

Conf. No.: 7847

For: CAPILLARY IMPRINTING TECHNIQUE

INFORMATION DISCLOSURE STATEMENT

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The following information is submitted in compliance with Applicants' duty of disclosure and pursuant to 37 C.F.R. § 1.56, The undersigned brings the patents, § 1.97 and § 1.98. publications, applications or other information identified in the attached:

\boxtimes	Form(s)	PTO/SB/08A	and/or	PTO/SB/08B	or	PTO/1449
П	Other:					

to the Examiner's attention in the above-identified application. It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed:

before the mailing date of a first Office action on the merits or before the mailing date of a first Office action after the filing of a request for continued examination under § 1.114. Therefore, no fee is believed required.

Applicants do not believe that any additional fees are due, but if the Commissioner believes additional fees are due, the

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CERTIFICATE OF TRANSMISSION I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as either First Class Mail or Express Mail, in an envelope addressed to the Commissioner

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Respectfully Submitted,

Kenneth C. Brooks, Reg. No. 38,393

Legal Department

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number Substitute for form 1449A/PTO Complete if Known **APPLICATION NUMBER** 10/645,306 INFORMATION DISCLOSURE STATEMENT BY APPLICANT 08/21/2003 **FILING DATE FIRST NAMED** Choi et al. **INVENTOR** 1763 Group Art Unit fuse as many sheets as necessary) **Examiner Name** Unassigned of 6 P86-28-03 Attorney Docket Number

				U.S. PATENT DOCUMEN	TS	
Examiner Initials*	Cite No. ¹	U.S. Patent Do	cument Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
				·		
	B1	6,234,379	B1	Donges	5/22/2001	
	B2	6,309,580	B1	Chou	10/30/2001	
	В3	6,391,217	B2	Schaffer et al.	5/21/2002	
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-	B5	2004/0007799	A1	Choi et al.	1/15/2004	
	В6	2004/0021254	A1	Sreenivasan et al.	2/5/2004	
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Evamine					Date	

Examiner	Date		
Signature	Considered		

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Substitute f	for form 1449A	VPTO		Comple	te if Known
INIT		N DISCL	SCUDE	APPLICATION NUMBER	10/645,306
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				FILING DATE	08/21/2003
317	A I EIVIEIN I	DI APPL	ICAN I	FIRST NAMED INVENTOR	Choi et al.
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Sheet	2	of	<u>,,</u>	Examiner Name	Unassigned
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				U.S. PATENT DOCUMEN	TS	
Examiner Initials*	Cite No.1	U.S. Patent Doo Number	cument Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
			·	<u></u> -		
	B19	6,482,742	B1	Chou	11/19/2002	
	B20	2003/0080471	A1	Chou	5/1/2003	
	B21	2004/0036201	A1	Chou et al.	2/26/2004	
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Examiner	Date	
Signature	Considered	

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Substitute	for form 1449A	/PTO		Comple	te if Known
11.15	ODMATION	i Dicci /	SOUDE	APPLICATION NUMBER	10/645,306
	ORMATION ATEMENT I			FILING DATE	08/21/2003
31/	AIEMENI	OT APPL	ICAN I	FIRST NAMED INVENTOR	Choi et al.
<i>(</i> (use as many shee	ts as necessa.	rv)	Group Art Unit	1763
Sheet	3	of	76	Examiner Name	Unassigned
				Attorney Docket Number	P86-28-03

Examiner	Cite	U.S. Patent De		Name of Patentee or Applicant	Date of Publication of	Pages, Columns, Lines,
Initials*	Cite Kind Code ² No. ¹ Number (if known)		of Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	
	B37	11/051,533	T	Fletcher et al.	2/4/2005	
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	B38	4,512,848	<u> </u>	Deckman et al.	4/23/1985	
	B39	6,517,995	B1	Jacobenson et al.	2/11/2003	
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INIT	ODMATIO	N DISCL	COUDE	APPLICATION NUMBER	10/645,306
	ORMATION ATEMENT I			FILING DATE	08/21/2003
317	A I E IVIE IN I	DI APPL	LICANI	FIRST NAMED INVENTOR	Choi et al.
				Group Art Unit	1763
(u	se as many shee	ets as necessa.	ry)	Examiner Name	Unassigned
Sheet	4	of	6	Attorney Docket Number	P86-28-03

			FOREIGI	N PATENT DOCUMENTS			
Cite No.¹	Office 3	Foreign Patent Docu Number ⁴	ment Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
B45	wo	00/21689		Chou et al.	4/20/2000		
B46	JP	02-92603		Kurikawa et al.	4/3/1990		
B47	JP	02-24848		Kamio	1/26/1990		
B48	wo	01/47003		Steiner et al.	6/28/2001		
B49	wo	02/07199		Chou	1/24/2002		
B50	wo	2004/114016		Chou et al.	12/29/2004		
B51	wo	99/05724		Chou et al.	2/4/1999		
B52	wo	03/010289		Chou et al.	2/6/2003		
B53	wo	03/079416		Chou	9/25/2003		
B54	wo	03/099536		Chou et al.	12/4/2003		
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	B45 B46 B47 B48 B49 B50 B51 B52 B53	No.' Office	Cite No.¹ 3 office Number⁴ B45 WO 00/21689 B46 JP 02-92603 B47 JP 02-24848 B48 WO 01/47003 B49 WO 02/07199 B50 WO 2004/114016 B51 WO 99/05724 B52 WO 03/010289 B53 WO 03/079416	Second Patent Document Sind Code Sind Code Number Number	Cite No.1 Office Office Number Mumber (if known) Kind Code (if known) Name of Patentee or Applicant of Cited Document B45 WO 00/21689 Chou et al. B46 JP 02-92603 Kurikawa et al. B47 JP 02-24848 Kamio B48 WO 01/47003 Steiner et al. B49 WO 02/07199 Chou B50 WO 2004/114016 Chou et al. B51 WO 99/05724 Chou et al. B52 WO 03/010289 Chou et al. B53 WO 03/079416 Chou	Cite No. Foreign Patent Document Name of Patentee or Applicant of Cited Document MM-DD-YYYY	Cite No.1 Spring Patent Document Number Kind Code (if known) Name of Patentee or Applicant of Cited Document Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

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Substitute for	r form 1449A/F	тο		Complete if Known		
INFO	RMATION	DISCLO	SURE	APPLICATION NUMBER	10/645,306	
STAT	TEMENT B	Y APPL	ICANT	FILING DATE	08/21/2003	
				FIRST NAMED INVENTOR	Choi et al.	
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Sheet	5	of	6	Examiner Name	Unassigned	
	1	<u> </u>		Attorney Docket Number	P86-28-03	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
	B55	Colburn et al., Step and Flash Imprint Lithography for sub-100 nm Patterning, Proceedings of SPIE Vol. 3997, pp. 453 - 457, 1/1/2000				
	B56	Johnson et al., Advances in Step and Flash Imprint Lithography, SPIE Microlithography Conference, 2/23/2003				
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	B60	Chou et al., Ultrafast and Direct Imprint of Nanostructures in Silicon, Nature, Col. 417, (June 2002), pp. 835-837, 6/1/2002				
	B61	Chou et al., Nanoimprint Lithography, Journal of Vacuum Science Technolgoy B 14(16), pp. 4129-4133, 11/1/1996				
	B62	Colburn et al., Development and Advantages of Step-and-Flash Lithography, Solid State Technology, 7/1/2001				
	B63	Colburn et al., Characterization and Modeling of Volumetric and Mechanical Properties for Step and Flash Imprint Lithography Photopolymers, Journal of Vacuum Science Technology. Vol b. 19(6), 11/1/2001				

Examiner	Date	
Signature	Considered	

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INFO	ORMATION	DISCLO	SURE	APPLICATION NUMBER	10/645,306
STA	TEMENT B	Y APPLI	CANT	FILING DATE	08/21/2003
				FIRST NAMED INVENTOR	Choi et al.
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Sheet	6	of	6	Examiner Name	Unassigned
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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No.						
		Della del Ota del Circle de della de					
	B64	Bailey et al., Step and Flash Imprint Lithography: Defect Analysis, Journal of Vacuum Science, B 19(6), pp. 2806-2810, 11/1/2001					
	B65	Bailey et al., Step and Flash Imprint Lithography: Template Surface Treatment and Defect Analysis, Journal of Vacuum Science, B 18(6), pp. 3572-3577, 11/1/2000 Schneider et al., Stripes of Partially Fluorinated Alkyl Chains: Dipolar Langmuir Monolayers					
	B66						
		-					
Examiner Signature		Date Considered	•• •				

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